

# NASA TECH BRIEF

## *Marshall Space Flight Center*



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### Statistical Analysis Tables for Truncated or Censored Samples

A compilation of auxiliary function tables extends the application of previously derived maximum likelihood estimators (see References) for normal distribution parameters of samples that are singly truncated or singly censored. Restricted samples of both types occur frequently in material, component, and device life tests; reliability analyses; dosage-response studies; target analyses, and biological assays. The compilation includes an introductory chapter describing the characteristics of the truncated and censored samples, and presents six illustrations of the practical use of the tables (with entries given to nine decimals) in computing mean and variance estimates for a normal distribution using the selected samples.

#### References:

1. Cohen, A. C.: Simplified Estimators for the Normal Distribution when Samples are Singly Censored or Truncated. *Technometrics*, vol. 1. 1959. pp. 217-237.
2. Cohen, A. C.: Tables for Maximum Likelihood Estimates: Singly Truncated and Singly Censored

Samples. *Technometrics*, vol. 10, 1961, pp. 535-541.

#### Note:

The following documentation may be obtained from:

National Technical Information Service  
Springfield, Virginia 22151  
Single document price \$3.00  
(or microfiche \$0.95)

#### Reference:

NASA-CR-61330 (N70-34233), Tables of Maximum Likelihood Estimating Functions for Singly Truncated and Singly Censored Samples from the Normal Distribution.

#### Patent status:

No patent action is contemplated by NASA.

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